

**REMARKS**

Claims 1-4 and 9-17 are rejected under 35 U.S.C. §102(b) as being anticipated by *Guo* (US 5,475,073). Claims 5-8 are rejected under 35 U.S.C. §103(a) as being obvious over *Guo*.

Applicants respectfully contend that claims 1-4 and 9-17 are not anticipated by *Guo* because (1) *Guo* fails to teach the use of low initiator concentration (0.8 wt % or less of the total amount of monomers) to make an acrylic polyol which has a low color increase (100% or less) when mixed with an UV light stabilizer and (2) the lowered color increase is not inherently possessed by *Guo*. Applicants also contend that claims 5-8 are not obvious over *Guo* because these claims depend from claim 1 which is not obvious over *Guo*. Claim 1 is not obvious over *Guo* because *Guo* does not teach all elements of claim 1.

**A. *Guo* cannot anticipate claims 1-4 and 9-17 because *Guo* fails to teach the use of low initiator concentration to produce acrylic polyols which have better color stability when mixed with UV light stabilizers.**

MPEP § 2131 instructs: "A claim is anticipated only if each and every element as set forth in the claim is found." See also *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). *Guo* does not teach the use of low initiator concentration to make an acrylic polyol having better color stability when mixed with UV light stabilizers, which is an essential element of the claims. Hence, *Guo* cannot anticipate the claimed invention according to MPEP § 2131.

Applicants' claims 1-4 and 9-17 define a method for making an acrylic polyol which has better color stability when mixed with UV light stabilizers. The method uses a low initiator concentration (0.8 wt % or lower based on the total amount of monomers, see *claim 1*). The resultant acrylic polyol has significantly lowered color increase when mixed with UV light stabilizers (100% or less

increase). In contrast, as the Examiner recognizes, *Guo* is silent on the color issue. However, the Examiner rejects the claims based on his belief that the color property is inherently possessed by *Guo*.

Note that Applicants' attorney, Mr. Guo, is the inventor of the cited reference *Guo*. Mr. Guo declares in this response that when he made his invention of US 5,475,073, he did not discover the color problem; that the color problem was latent and observed only when the resultant polyol is mixed with UV stabilizers; and that the inventors of this application subsequently discovered and resolved this problem.

In fact, Applicants have provided ample evidence in the specification which also shows that acrylic polyols made by following the general teachings of *Guo* have high color increase when mixed with UV light stabilizers. Applicants herein reproduce Table 1 of page 11 from the original application.

**TABLE 1**  
**APHA COLOR TEST RESULTS**

Ex. No.	Initiator Concentration	Solvent	A <sub>o</sub>	A	Δ
1	0.41%	No	20	39	95%
2	0.41%	Isopropanol	42	60	43%
C3	0.81%	No	30	89	197%
C4	1.60%	No	29	95	228%
C5	6.10%	No	30	125	317%
6	0.48%	No	40	60	50%
7	0.43%	Isopropanol	45	60	33%
C8	6.50%	No	54	125	131%

In Table 1, C3-C5 and C8 are comparative examples which follow the *Guo* teachings. These comparative examples clearly show that the polyols made by *Guo* have high color increase when mixed with UV light stabilizers (Δ is greater than 100%). Unlike *Guo*, Applicants used a low initiator concentration and made acrylic polyols which have significantly lower color increase when mixed with UV

stabilizers ( $\Delta$  less than 100%, see Examples 1, 2, 6 and 7). Thus, Applicants conclude that *Guo* does not teach the claimed invention.

**B. *Guo* cannot make claims 5-8 obvious because the claims depend from claim 1; claim 1 is not obvious over *Guo* because *Guo* fails to teach all elements of claim 1.**

Applicants contend that there is no *prima facie* case of obviousness for the present claims over *Guo*. MPEP §2142 provides

“To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

First, Applicants contend that claim 1 is not obvious over *Guo* because *Guo* fails to teach all of the elements of claim 1. To establish a *prima facie* case of obviousness, the Examiner must consider all claim limitations. MPEP §2143.03 provides that “To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). As discussed above, *Guo* does not teach or suggest the use of a low initiator concentration to make an acrylic polyol which has a low color increase when mixed with UV light stabilizers. Thus, *Guo* cannot make claim 1 obvious according to MPEP §§2142 and 2143.03.

Next, Applicants contend that claims 5-8 are not obvious over *Guo* because these claims depend from claim 1. MPEP §2143.03 provides that “If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

1988)." Hence, *Guo* cannot make claims 5-8 obvious because claim 1 is not obvious over *Guo*.

Accordingly, Applicants respectfully ask the Examiner to withdraw the rejections and to allow claims 1-17. Applicants invite the Examiner to telephone their attorney, Mr. Shao-Hua Guo, at (610) 359-6059 if a discussion of the application might be helpful.

Respectfully submitted,  
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02/04/2004